



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,431	03/30/2004	Alexei Kojenov	SJO920030085US1	5731
46917	7590	08/23/2007	EXAMINER	
KONRAD RAYNES & VICTOR, LLP.			DAYE, CHELCIE L	
ATTN: IBM37			ART UNIT	PAPER NUMBER
315 SOUTH BEVERLY DRIVE, SUITE 210			2161	
BEVERLY HILLS, CA 90212				
MAIL DATE		DELIVERY MODE		
08/23/2007		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/814,431	KOJENOV ET AL.
	Examiner Chelcie Daye	Art Unit 2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 01 June 2007.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-36 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-36 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

1. This action is issued in response to applicant's RCE filed June 01, 2007.
2. Claims 1-36 are presented. No claims are added and none cancelled.
3. Claims 1-36 are pending.

Continued Examination Under 37 CFR 1.114

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e) was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 01, 2007 has been entered.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-9,11,13-21,23,25-33, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maurer (US Patent Application No. 20030065780) filed September 27, 2002, in view of "Applicant Admitted Prior Art", paragraphs [0004-0008], referred to hereinafter as 'AAPA'.**

Regarding Claims 1,13, and 25, Maurer discloses a data management method, comprising:

a data storage device having a database comprising a plurality of objects (Abstract, Maurer);

a digital data processing apparatus coupled to the storage device, wherein the digital data processing apparatus is programmed to perform a data management method ([0040], Maurer), said method comprising:

backing up contents of a source device at a first client station as at least one object of a database stored in a data storage subsystem wherein the at least one object represents an image of the contents of the source device ([0060-0061] and [0106], Maurer)¹;

using the at least one object, restoring the contents of the source device from the at least one object to a target file in a file system stored on a storage device so that the target file contains said contents of the source device ([0078-0080] and [0109-0110], Maurer), said file system comprising a plurality of files and an address table identifying the location of each file on said storage device ([0083-0085], Maurer); and

copying the restored contents of the source device from the target file to a target device so that the target device contains the contents of the source device ([0112] and [0115], Maurer). However, Maurer is silent with respect to using the

database, tracking attributes and location of the at least one object in the database. On the other hand, AAPA discloses using the database, tracking attributes and location of the at least one object in the database ([0004], AAPA). It would have been obvious to one of ordinary skill in the art to incorporate AAPA's teachings into the Maurer system. As skilled artisan would have been motivated to combine in order determine and find the needed information more quickly and efficiently.

Regarding Claims 2,14, and 26, the combination of Maurer in view of AAPA, disclose the method wherein the target file is stored on storage media at a second client station ([0108-0109], Maurer).

Regarding Claims 3,15, and 27, the combination of Maurer in view of AAPA, disclose the method wherein the target file contains the complete contents of the source device ([0074], lines 7-11, Maurer).

Regarding Claims 4,16, and 28, the combination of Maurer in view of AAPA, disclose the method wherein the contents of the source device contained by the target file includes files and a file directory of the source device ([0053], lines 13-16 and [0079], Maurer).

¹ Examiner Notes: Host 113a corresponds to the source device, also throughout the reference the term

Regarding Claims 5,17, and 29, the combination of Maurer in view of AAPA, disclose the method wherein the data storage subsystem includes a server coupled to the first client station by a network (Fig.1; [0042], Maurer).

Regarding Claims 6,18, and 30, the combination of Maurer in view of AAPA, disclose the method further comprising, using the at least one object, restoring the contents of the source device from the at least one object to a target device so that the target device contains the contents of the source device ([0078-0080], Maurer).

Regarding Claims 7,19, and 31, the combination of Maurer in view of AAPA, disclose the method wherein the source device is a raw storage device ([0120], Maurer).

Regarding Claims 8,20, and 32, the combination of Maurer in view of AAPA, disclose the method wherein the source raw storage device is a logical volume of at least one magnetic disk drive ([0139], Maurer).

Regarding Claims 9,21, and 33, the combination of Maurer in view of AAPA, disclose the method wherein the source raw storage device is a partition of a magnetic disk drive ([0053], Maurer).

Regarding Claims 11,23, and 35, the combination of Maurer in view of AAPA, disclose the method wherein said target file is a flat file ([0074], Maurer).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 10,12,22,24,34, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maurer (US Patent Application No. 20030065780) filed September 27, 2002, in view of “Applicant Admitted Prior Art”, paragraphs [0004-0008], referred to hereinafter as ‘AAPA’, and further in view of “Logical vs. Physical File System Backup”, By: Hutchinson, Published: 1999; referred to hereinafter as ‘Hutchinson’.**

Regarding Claims 10,22, and 34, the combination of Maurer in view of AAPA, disclose the method further comprising mounting the source device ([0079], Maurer). However, Maurer is silent with respect to the source device being a read only device wherein write operations to said source device are prevented during said backing up of said source device. On the other hand, Hutchinson discloses the source device being a read only device wherein write

operations to said source device are prevented during said backing up of said source device (pg.3, column 2, 1st full paragraph, Hutchinson). Maurer and Hutchinson are analogous art because they are from the same field of endeavor of system backup/restore. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Hutchinson's teachings into the Maurer system. A skilled artisan would have been motivated to combine as suggested by Hutchinson at pg. 2, column 2, in order to provide system history and increase resilience to disasters, which means that it is important that the format used to store data must be archival in nature. As a result, maximizing the speed for data backup and minimizing the resources that are used in performing the backup.

Regarding Claims 12,24, and 36, the combination of Maurer in view of AAPA, and further in view of Hutchinson, disclose the method wherein said copying uses the UNIX dd command (pg.3, 2nd full paragraph, lines 5-9, Hutchinson).

ALTERNATIVE REJECTION:

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 1,3-8,13,15-20,25, and 27-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Cannon (US Patent No. 6,098,074) issued August 1, 2000.

Regarding Claims 1,13, and 25, Cannon discloses a data management method, comprising:

a data storage device having a database comprising a plurality of objects (column 4, lines 26-46, Cannon);

a digital data processing apparatus coupled to the storage device, wherein the digital data processing apparatus is programmed to perform a data management method (column 10, lines 22-34, Cannon), said method comprising:

backing up contents of a source device at a first client station as at least one object of a database stored in a data storage subsystem wherein the at least one object represents an image of the contents of the source device (column 13, lines 50-67 and columns 16-17, lines 55-67 and 1-14, respectively, Cannon);

using the database, tracking attributes and location of the at least one object in the database (column 7, lines 53-64 and column 9, lines 31-41, Cannon);

using the at least one object, restoring the contents of the source device from the at least one object to a target file in a file system stored on a storage device so that the target file contains said contents of the source device (column

14, lines 1-13 and column 17, lines 18-44, Cannon), said file system comprising a plurality of files and an address table identifying the location of each file on said storage device (column 4, lines 41-46, Cannon); and

copying the restored contents of the source device from the target file to a target device so that the target device contains the contents of the source device (column 14, lines 41-67, Cannon).

Regarding Claims 3,15, and 27, Cannon discloses the method wherein the target file contains the complete contents of the source device (column 17, lines 6-14, Cannon).

Regarding Claims 4,16, and 28, Cannon discloses the method wherein the contents of the source device contained by the target file includes files and a file directory of the source device (column 4, lines 41-46 and column 7, lines 8-12, Cannon).

Regarding Claims 5,17, and 29, Cannon discloses the method wherein the data storage subsystem includes a server coupled to the first client station by a network (column 4, lines 9-20, Cannon).

Regarding Claims 6,18, and 30, Cannon discloses the method further comprising, using the at least one object, restoring the contents of the source

device from the at least one object to a target device so that the target device contains the contents of the source device (column 14, lines 1-13 and column 17, lines 18-44, Cannon).

Regarding Claims 7,8,19,20,31, and 32, Cannon discloses the method wherein the source raw storage device is a logical volume of at least one magnetic disk drive (column 4, lines 59-62, Cannon).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 2,9,11,14,21,23,26,33, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon (US Patent No. 6,098,074) filed October 29, 1997, in view of Maurer (US Patent Application No. 20030065780) filed September 27, 2002.

Regarding Claims 2,14, and 26, Cannon discloses all of the claimed subject matter as stated above. However, Cannon is silent with respect the target file being stored on storage media at a second client station. On the other hand, Maurer discloses the target file being stored on storage media at a second client

station ([0108-0109], Maurer). Cannon and Maurer are analogous art because they are from the same field of endeavor of data restoration. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Maurer's teachings into the Cannon system. A skilled artisan would have been motivated to combine in order to store the needed data on an alternate location, such that if/when one location fails the needed data is not lost, but instead located elsewhere. As a result, allowing for a better recovery system.

Regarding Claims 9,21, and 33, the combination of Cannon in view of Maurer, disclose the method wherein the source raw storage device is a partition of a magnetic disk drive ([0053], Maurer).

Regarding Claims 11,23, and 35, the combination of Cannon in view of Maurer, disclose the method wherein said target file is a flat file ([0074], Maurer).

13. Claims 10,12,22,24,34, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cannon (US Patent No. 6,098,074) filed October 29, 1997, in view of Maurer (US Patent Application No. 20030065780) filed September 27, 2002, and further in view of “Logical vs. Physical File System Backup”, By: Hutchinson, Published: 1999; referred to hereinafter as ‘Hutchinson’.

Regarding Claims 10,22, and 34, the combination of Cannon in view of Maurer, disclose the method further comprising mounting the source device ([0079], Maurer). However, Cannon in view of Maurer, are silent with respect to the source device being a read only device wherein write operations to said source device are prevented during said backing up of said source device. On the other hand, Hutchinson discloses the source device being a read only device wherein write operations to said source device are prevented during said backing up of said source device (pg.3, column 2, 1st full paragraph, Hutchinson). Cannon, Maurer, and Hutchinson are analogous art because they are from the same field of endeavor of system backup/restore. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Hutchinson's teachings into the Cannon and Maurer system. A skilled artisan would have been motivated to combine as suggested by Hutchinson at pg. 2, column 2, in order to provide system history and increase resilience to disasters, which means that it is important that the format used to store data must be archival in nature. As a result, maximizing the speed for data backup and minimizing the resources that are used in performing the backup.

Regarding Claims 12,24, and 36, the combination of Cannon in view of Maurer, and further in view of Hutchinson, disclose the method wherein said copying uses the UNIX dd command (pg.3, 2nd full paragraph, lines 5-9, Hutchinson).

Response to Arguments

Applicant's arguments with respect to the newly amended claims have been considered but are moot in view of the new ground(s) of rejection.

Points of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chelcie Daye whose telephone number is 571-272-3891. The examiner can normally be reached on M-F, 7:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chelcie Daye
Patent Examiner
Technology Center 2100
August 13, 2007



APU MOFIZ
SUPERVISORY PATENT EXAMINER